

Title (en)  
PISTON OF INTERNAL COMBUSTION ENGINE

Title (de)  
KOLBEN EINES VERBRENNUNGSMOTORS

Title (fr)  
PISTON D'UN MOTEUR À COMBUSTION INTERNE

Publication  
**EP 2184477 B1 20130417 (EN)**

Application  
**EP 08751771 A 20080520**

Priority  
• JP 2008001253 W 20080520  
• JP 2007219071 A 20070824  
• JP 2007219067 A 20070824

Abstract (en)  
[origin: EP2184477A1] To provide a piston for an internal combustion engine including a skirt which causes a relatively small frictional resistance and can maintain a favorable frictional property over an extended period of time. In a piston for an internal combustion engine having a skirt 4 on whose sliding surface a resin coating layer is deposited, the skirt 4 comprises a thin walled portion 51 located in a circumferentially middle part thereof and a pair of thick walled portions 52 provided on either lateral side of the thin walled portion 51. The resin coating layer 44 at least in the part thereof deposited on the thick walled portions 52 is formed with a plurality of dimples 45. The skirt may comprise a skirt main body 41 extending axially at a fixed distance from the central axial line of the piston in an axially middle part thereof, and a first reduced diameter portion 42 depending from the lower end of the skirt main body and having a progressively smaller diameter toward a lower end thereof. The dimples 45 may be arranged along a first boundary 6 between the skirt main body and first reduced diameter portion.

IPC 8 full level  
**F02F 3/02** (2006.01); **F02F 3/10** (2006.01); **F16J 1/02** (2006.01); **F16J 1/04** (2006.01)

CPC (source: EP US)  
**F02F 3/027** (2013.01 - EP US); **F02F 3/105** (2013.01 - EP US); **F16J 1/04** (2013.01 - EP US)

Citation (examination)  
SWEETHAVEN PUBLISHING SERVICES: "Piston Assembly", 31 December 2004 (2004-12-31), Retrieved from the Internet <URL:http://www.waybuilder.net/sweethaven/MechTech/Automotive01/default.asp?unNum=2&lesNum=3&modNum=1> [retrieved on 20120214]

Cited by  
CN106194480A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 2184477 A1 20100512; EP 2184477 A4 20110216; EP 2184477 B1 20130417**; BR PI0815906 A2 20150303; CN 101784780 A 20100721; CN 101784780 B 20130327; US 2011139114 A1 20110616; US 8640669 B2 20140204; WO 2009028128 A1 20090305

DOCDB simple family (application)  
**EP 08751771 A 20080520**; BR PI0815906 A 20080520; CN 200880104129 A 20080520; JP 2008001253 W 20080520; US 67506408 A 20080520